REVIEWS AND NOTES

Bailey's Principles of Fruit Growing*

The volume just issued is the twentieth edition of the work. Although representing a new edition of a former work, practically the entire book has been rearranged and rewritten. All phases of the subject are considered from the selection and location of the land to the harvesting and marketing of the crop.

The early chapters are devoted to a careful consideration of the physical factors concerned in fruit raising, such as topographical features, climate, soil, fertilizers and the best methods of tillage. The following two chapters deal with the selection of the varieties, and the planting and subsequent care of the trees. Considerable attention is given to the matter of pruning.

Under accidents and injuries a list of the principal insect and fungous enemies is given with suggestions for their control. The concluding chapter is devoted to the harvesting and marketing of the product. The entire work is well illustrated and so written as to appeal to the amateur as well as to the professional fruit-grower.

F. J. SEAVER

Baden's Observations on the Germination of Spores of Coprinus sterquilinus †

Miss Baden in an attempt to study the sexuality in the Basidiomycetes reports that the spores of *Coprinus sterquilinus*, a European ink-cap which resembles somewhat *Coprinus stercorarius* do not germinate in Kuster's solution. However when the spores are subjected to digestive juices or are placed in a decoction made of horse dung the spores are found to produce germ tubes. The cause of germination the author ascribes to the influence of certain rod-shaped bacteria. To prove this contention filtered and sterilized horse dung decoction was inoculated with the spores in question but no germination took place. When the natural dung bacteria were present germination took place readily. Another point of considerable interest which Miss

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* Bailey, L. H. The Principles of Fruit Growing, pp. i–xiv, 1–432, figs. 186. Macmillan Co., 1915. $1.75.

† Baden, Margaret L. Observations on the Germination of Spores of Coprinus sterquilinus. Ann. Bot. **29**: 135–142, pl. 7. 1915.

Baden makes is that after five or six days further germination of spores and growth of the germ tubes already formed is inhibited through the action of another form of bacillus present in the cultures. The characteristics of these two types of bacilli have not been determined. Miss Baden gives no explanation of how *Coprinus* spores free from bacteria may be obtained. That *Coprinus* spores germinate in the presence of bacteria is well known to the mycologist. The problem lies in growing spores of various fungi in pure culture. Then and only then may we dare to approach the question—"What is the origin of the binucleated condition in the Basidiomycetes?"

<div align="right">MICHAEL LEVINE</div>

NEWS ITEMS

Dr. Henry S. Conard, professor of botany in Grinnell College, Iowa, will be in residence at Harvard University during the second semester of the current school year as "Visiting Lecturer," on the Exchange Relation of the colleges of the middle west.

Mr. R. C. Faulwetter at Columbia University has been appointed Plant Pathologist at the Experiment Station of South Carolina at Clemson College. Mr. Faulwetter's new duties begin in January.

The friends and colleagues of Professor Peck, who has recently retired from the position of New York State Botanist after nearly fifty years of service, have expressed a wish to commemorate his important labors in the field of mycology by placing in the new rooms of the New York State Museum an exhibit of reproductions of the Edible and Poisonous Fungi of New York. Further information may be obtained from Dr. J. M. Clarke, Education Building, Albany, N. Y.

At the Columbus meeting of the American Association for the Advancement of Science a group of botanists and zoologists interested in ecology organized the American Ecological Society. This action was the culmination of a meeting in Philadelphia in 1914, reported in TORREYA for November, 1915. The first